

State of Missouri

Regulatory Impact Report for Proposed Rule Amendment 10 CSR 20-7.015 Effluent Regulations



Missouri Department of Natural Resources

Water Protection and Soil Conservation Division

Water Protection Program

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Basic Rule Information

Program/Division: Water Protection Program, Division of Water Protection and Soil Conservation

Rule Number: 10 CSR 20-7.015 **Rule Title:** Effluent Regulations

Type of rule: Proposed Amendment Revision

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Introduction

This Regulatory Impact Report was written to comply with Chapter 640.015 RSMo and is a means to provide to the public and interested parties the information on rule development within the Department of Natural Resources. It is a summary of the information, discussion, input, and rationale used by the department in development of a draft rule. The goal of this Report is to ensure accountability, consistency, and transparency in the rulemaking process. Distribution of the Report will make this information readily available to a wide audience in a timely manner.

The department is proposing revisions to the Effluent Regulations to clarify existing language, update names and titles referenced by the rule, reflect changes being proposed in the water quality standards at 10 CSR 20-7.031 and to establish schedules or effective dates for achieving compliance with the proposed water quality standards. Following is a summary of these proposed revisions:

The Department of Natural Resources is amending the following:

- (1)(A)3 and (7)(C) to reflect the name change from the Division of Geology and Land Survey to the Geological Survey and Resource Assessment Division,
- (2)(B)4, (3)(B)3 and (8)(B)4 to add language referencing the implementation schedule for facilities that must install disinfection,
- (3)(F)1 to clarify the effective date of phosphorus rule for Lake Taneycomo,
- (3)(G)2, 3 and 4 to clarify the effective date of phosphorus rule for Table Rock Lake,
- (4)(B)5 to revise confusing language regarding requirements for dechlorination,
- (6) to make this rule more consistent with the changes proposed to the water quality standards for certain pollutant levels in waters of the state,
- (6)(A) and (B) to reflect the proposed changes to the implementation of the Tier III antidegradation rule, and
- (9)(H) to add language explaining the implementation schedule for facilities to comply with new water quality standards proposed to protect whole body contact recreation.

Because this proposed rule does not establish new water quality standards, its impact is confined to the effect from the timeframes that it imposes on compliance. These timelines were not developed from scientific data and, therefore, certain portions of this report are not directly applicable to this rulemaking. Reference is occasionally made to the Regulatory Impact Report for the proposed rule on water quality standards in order to identify the relationship between the two (10 CSR 20-7.015 and 10 CSR 20-7.031).

Regulatory Impact Report

1. Does the rulemaking adopt rules from the US Environmental Protection Agency or rules from other applicable federal agencies without variance?

No. The proposed rules are not written word-for-word with federal rules. Because federal standards are written to apply to the environment on a national scale, they do not contain standards directly applicable to any state's water quality conditions. EPA develops guidance for states to use in developing rules effecting implementation at a state level and expects states to develop rules applicable to state-specific environmental conditions and needs. EPA also requires that state standards be functionally equivalent to the federal Clean Water Act. For this reason, state standards are written differently but are based on and are consistent with EPA guidance.

2. Report on peer-reviewed scientific data used to commence the rulemaking process.

Effluent regulations (ER) are the practical application of water quality standards (WQS). As mentioned in the introduction section of this document, the changes involve schedules, effective dates, and clarifications. A workgroup of department staff determined, through best professional judgement, that a revision was necessary regarding dechlorination in losing streams [10 CSR 20-7.015(4)(B)5]. In addition, changes were made to the effluent regulations to implement the revisions being proposed in the state's water quality standards. The implementation of the water quality standards through the effluent regulations does not rely on scientific analysis. The department's decision on the implementation requirements relied on an assessment of the feasibility of achieving compliance with the proposed water quality standards, an evaluation of the permitting requirements and a review of the statutory deadlines for achieving compliance with new standards, and other procedural and practical considerations. These aspects were assessed by examining the numbers and types of facilities likely to be impacted by the revisions to the ER, and numbers and types of upgrades likely needed because of the new standards. Decisions on these aspects are contained throughout the following paragraphs.

The following WQS revision:	resulted in a change to or addition of	The following ER revision:
1. Whole Body Contact Recreation designation		1. An implementation schedule for compliance with disinfection requirements.
2. Outstanding National and State Resource Water language		2. Special effluent limitation in 10 CSR 20-7.015(6) consistent with Antidegradation policy.

3. Description of persons who will most likely be affected by the proposed rule, including persons that will bear the costs of the proposed rule and persons that will benefit from the proposed rule.

The entities most likely to be affected by the proposed rule are those subject to the proposed schedule for meeting the new bacteria standards on whole body contact recreation. This proposed schedule might affect up to 911 facilities. The actual number of affected facilities depends on how many will need to upgrade to comply with new water quality standards. Those that do not need to upgrade may still need to perform evaluations of their discharges to confirm compliance with the new water quality standards. The department was not able to determine or make a reasonable estimate of the number of facilities either needing to upgrade or to perform a water quality evaluation.

Benefits of this proposed rule include better clarification on implementation matters such as effective dates and schedules for compliance on certain portions of the rule, as well as clearer language on where disinfection of discharges is required. These clarifications will improve the understanding of the effluent regulations and will facilitate decision-making relevant to the regulations.

4. Description of the environmental and economic costs and benefits of the proposed rule.

Environmental Benefits: This proposed rule would implement the changes to the state's water quality standards at 10 CSR 20-7.031. Consequently, most of the environmental benefits are attributable to the changes proposed in the other rule. The environmental benefit of the changes to the effluent rule will be better assurance of progress toward achieving the environmental benefits described in the Regulatory Impact Report on the proposed revisions to the WQS. The draft ER helps accomplish this goal by focusing the effort through the proposed implementation schedules and effective dates.

Environmental Costs: No significant short-term or long-term negative impacts to the environment will occur from this proposed rule. The proposed schedules are intended to create a systematic approach to achieving compliance with the new water quality standards that, overall, will increase the level of protection to waters of the state.

Economic Benefits: Some operational efficiency may result from the clarifications presented by this proposed rule. Furthermore, as stated in the WQS Regulatory Impact Report, the proposed WQS do lessen the criteria in a few instances where new science has shown that less stringent standards are sufficiently protective. However, it is unlikely that these minor changes in standards will result in the downgrading of existing treatment systems.

Economic Costs: This proposed amendment was written in conjunction with proposed changes to 10 CSR 20-7.031, Water Quality Standards. Because these rules would be administered jointly, the department has determined potential costs as an aggregate for both rulemakings. The rulemakings together will cost private and public entities (permitted facilities) an estimated three hundred four million, eight hundred sixty-six thousand dollars (\$304,866,000) in the aggregate. Although the cost and figures are included in the documentation for both rules, the cost will only be incurred once. The

reader is referred to Section 4 of the Regulatory Impact Report for the Water Quality Standards for the basis for the cost estimation and assumptions. Additionally, the schedules consider the capabilities of the department to perform the necessary review for compliance and to process the permit modifications that result from the new water quality standards. In some cases, facilities may have up to eight years to comply. Therefore, the compliance schedule stretches the economic cost over an eight-year period.

5. Probable costs to the agency and to any other agency of the implementation and enforcement of the proposed rule and any anticipated effect on state revenue.

The impact on state revenue is the same for both this proposed amendment and the proposed amendment to 10 CSR 20-7.031, Water Quality Standards. The cost and figures are included in the documentation for both rules, although the cost will only be incurred once (see explanation in Section 5 of the Regulatory Impact Report for the Water Quality Standards). As stated above, the schedule for requiring compliance with the proposed standards for protection of WBCR on all classified waters will be up to eight years. Implementing the new standards in an incremental way (as permits come up for renewal) will lessen the overall financial burden on the state.

6. Comparison of the probable costs and benefits of the proposed rule to the probable costs and benefits of inaction, which includes both economic and environmental costs and benefits.

Without schedules or effective dates in the effluent rule, the proposed revisions to the water quality standards could be enforceable upon the effective date of the proposed changes in 10 CSR 20-7.031. The costs to the effected regulated entities may be greater where immediate compliance is required. Immediate compliance would limit the opportunity for the regulated entities to find the most cost-effective approach to achieving compliance.

Upon the effective date of the WQS, all standards become enforceable for the purposes of the Missouri Clean Water Law. The standard at 10 CSR 20-7.031(10) allows up to three years from the date of issuance of the National Pollutant Discharge Elimination System (NPDES) or Missouri operating permit for compliance with new or revised permit limits. Though a compliance period could be granted at the time of permit renewal, the department does have the discretion to require immediate action. For example, if human health is threatened, treatment may be required as quickly as possible. The draft implementation schedule contained in the effluent regulations is to ensure consistency and a transparent approach.

One of this state's greatest natural resources is its abundant water. The WQS are designed to protect that resource. If this rulemaking does not become effective, some of those resources will not be protected to the extent required by federal law. In addition, public health might be more greatly affected and water use impairment might result due to the need for more stringent water quality criteria for adequate protection of aquatic life (fish consumption), recreational uses, and drinking water supplies. Many of these

impacts are immeasurable in terms of costs simply because the exact effects from lack of action is unknown and incalculable. No comparison can be made to environmental benefits without associating a cost to lowered health of citizens and the environmental impacts that this rulemaking is intended to prevent. Section 6 of the Regulatory Impact Report on the draft WQS offers some insight into the economic value of surface waters.

The state of the economy depends to some extent on the state of the environment. An overall economic benefit might be seen in an area that can advertise good water quality. An environment that is free of water use impairments is attractive to many human activities, from tourism to industry.

7. Determination of whether there are less costly or less intrusive methods for achieving the proposed rule.

The proposed schedule could be revised for achieving compliance with the draft standards for protection of all classified waters for WBCR. However, an adjustment would only temporarily effect costs. The schedules and effective dates, proposed in this rule, should provide adequate time for the regulated entities to achieve compliance. The proposed rule contains a schedule for compliance that considers the need for both the department and the regulated entities to allot time for organizing their resources to address the new requirements. Less aggressive schedules would unnecessarily delay implementation of the new standards proposed in 10 CSR 20-7.031 Water Quality Standards.

8. Description of any alternative method for achieving the purpose of the proposed rule that were seriously considered by the department and the reasons why they were rejected in favor of the proposed rule.

The department considered having no schedule. The department chose the permit renewal dates as the time to impose compliance schedules in that it represented the most manageable schedule. Expiring permits are required to be reviewed for compliance to new standards at that time and the permit holders would already be aware of the potential for new requirements.

The proposed schedule represents the most appropriate balance between the need to promptly achieve functional equivalence with federal standards and the need to consider the present social-economic conditions in effected communities as well as the treatment capabilities of the regulated entities. See section 8 of the WQS Regulatory Impact Report for alternatives and additional information.

9. Analysis of both short-term and long-term consequences of the proposed rule.

This proposed rule would require certain regulated entities to upgrade their systems in accordance with a schedule or an effective compliance date. Consequently, the regulated entities affected by this rule must review their wastewater systems to determine any needed upgrades and to achieve those upgrades within a specified time. Those facilities

that must upgrade their treatment processes must design those upgrades and prepare and submit applications for construction permits and revised operating permits.

Improvements in water quality should result once these upgrades are completed, permits are issued and the new treatment systems are in operation.

10. Explanation of the risks to human health, public welfare or the environment addressed by the proposed rule.

Without a schedule of compliance, the proposed water quality standards could be immediately enforceable. Such a sudden effective date for compliance would pose unrealistic expectations for accomplishing upgrades. The imposition of a schedule for compliance might cause some risk to public welfare if the schedule causes municipal resources to be diverted from other public infrastructure improvements. On the other hand, if the schedule is excessively long, the risk increases for harm to public health and the environmental.

11. Identification of the sources of scientific information used in evaluating the risk and a summary of such information.

This proposed rule addresses the need for clarifying existing rules and for establishing schedules for achieving compliance with the new standards proposed in another rule. See section 2 for more details.

12. Description and impact statement of any uncertainties and assumptions made in conducting the analysis on the resulting risk estimate.

The purpose of this rulemaking is to reduce or eliminate the existing risks from water pollution. See section 10.

13. Description of any significant countervailing risks that may be caused by the proposed rule.

None. See responses to Sections 10, 11 and 12.

14. Identification of alternative regulatory approaches that will produce comparable human health, public welfare or environmental outcomes.

A number of alternate compliance schedules were discussed during the development of this proposed rule. These include 1) present approach, 2) immediate compliance when permits are renewed, or 3) immediate compliance when the WQS become effective. The schedules proposed are believed to represent the most reasonable balance between the need for environmental and health protection and the need for time to upgrade water treatment.

15. Information on how to provide comments on the Regulatory Impact Report during the 60-day period before the rule is provided to the Secretary of State.

The department posted a notice in the Jefferson City News Tribune that the Regulatory Impact Report was available for public comment for a period of 60 days. The same notice was posted on the department's web page at www.dnr.mo.gov/wpscd/wpcp/index.html. Persons wanting to comment on the RIR were asked to submit them in writing to Ms. Marlene Kirchner, Commission Secretary, Missouri Clean Water Commission, Water Protection Program at P.O. Box 176, Jefferson City, Missouri 65102. The department also accepted faxed comments. The deadline for submitting comments was clearly explained in the newspaper advertisement and in the web page announcement.

16. Information on how to request a copy of comments or the web information about where the comments will be located.

Requests for copies of the comments received on this RIR may be sent to Ms. Marlene Kirchner, Commission Secretary, Missouri Clean Water Commission, Water Protection Program at P.O. Box 176, Jefferson City, Missouri 65102, or faxed to (573) 526-1146. Comments on the report will be posted on the department's web page at [<www.dnr.mo.gov/wpscd/wpcp/index.html>](http://www.dnr.mo.gov/wpscd/wpcp/index.html) along with copies of the revised RIR.